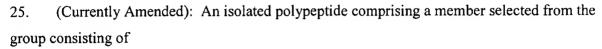


Docket No.: BM45352

## In the Claims:

Claims 1-24 (Cancelled)



- an amino acid sequence comprising the sequence set forth in SEQ ID NO:2 (a) matching one of SEQ ID NOs:2 (BASB047), 4 (BASB054), 6 (BASB068), or 8 (BASB069);
- an immunogenic polypeptide comprising a fragment sequence of at least 15 (b) amino acids that corresponds to matches an aligned contiguous segment of SEQ ID NO:2 one of SEO-ID NOs: 2, 4, 6, or 8;

wherein the isolated polypeptide, when administered to a subject in a suitable composition which can include an adjuvant, or a suitable carrier coupled to the polypeptide, induces an antibody or T-cell immune response to a polypeptide having the sequence of SEQ ID NO:2 one of SEQ ID NOs:2, 4, 6, or 8.

- (Withdrawn): An isolated polynucleotide encoding a polypeptide of Claim 25 or the full 26. complement to the isolated polynucleotide.
- (Original): The isolated polypeptide of claim 25, wherein the polypeptide is according to 27. (a).
- 28. (Withdrawn): An isolated polynucleotide encoding a polypeptide of Claim 27 or the full complement to the isolated polynucleotide.
- 29. (Original) The isolated polypeptide of claim 25, wherein the polypeptide is according to (b).
- (Withdrawn): An isolated polynucleotide encoding a polypeptide of Claim 29 or the full 30. complement to the isolated polynucleotide.

Serial No.: 09/889,746 Docket No.: BM45352

31. (Original): The isolated polypeptide of claim 25, wherein the immunogenic fragment of (b) comprises at least 20 amino acids.

- 32. (Currently Amended): The isolated polypeptide of Claim 25 wherein the isolated polypeptide of (a) consists of <u>SEQ ID NO:2</u> one of <u>SEQ ID NOs:2</u>, 4, 6, and 8.
- 33. (Withdrawn): An isolated polynucleotide encoding a polypeptide of Claim 32 or the full complement to the isolated polynucleotide.
- 34. (Withdrawn): A process for expressing the polynucleotide of Claim 33 comprising transforming a host cell with an expression vector comprising the polynucleotide and culturing the host cell under conditions sufficient for expression of the polynucleotide.
- 35. (Original): A fusion protein comprising the isolated polypeptide of Claim 25.
- 36. (Withdrawn): An isolated polynucleotide comprising the polynucleotide of one of SEQ ID NOs:1, 3, 5, or 7.
- 37. (Withdrawn): An isolated polynucleotide segment comprising a polynucleotide sequence or the full complement of the entire length of the polynucleotide sequence, wherein the polynucleotide sequence hybridizes to the full complement of one of SEQ ID NOs:1, 3, 5, or 7 minus the complement of any stop codon, wherein the hybridization conditions include incubation at 42°C in a solution comprising: 50% formamide, 5x SSC (150mM NaCl, 15mM trisodium citrate), 50 mM sodium phosphate (pH7.6), 5x Denhardt's solution, 10% dextran sulfate, and 20 micrograms/ml denatured, sheared salmon sperm DNA, followed by washing in 0.1x SSC at 65°C; and, wherein the polynucleotide sequence is identical to one of SEQ ID NOs:1, 3, 5, or 7 minus any terminal stop codon, except that, over the entire length corresponding to one of SEQ ID NOs:1, 3, 5, or 7 minus any terminal stop codon,  $\mathbf{n}_n$  nucleotides are substituted, inserted or deleted, wherein  $\mathbf{n}_n$  satisfies the following expression

Serial No.: 09/889,746

Docket No.: BM45352

$$\mathbf{n}_{\mathbf{n}} \leq \mathbf{x}_{\mathbf{n}} - (\mathbf{x}_{\mathbf{n}} \bullet \mathbf{y})$$

wherein  $\mathbf{x}_n$  is the total number of nucleotides in SEQ ID NOs:1, 3, 5, or 7 minus any terminal stop codon,  $\mathbf{y}$  is at least 0.95, and wherein any non-integer product of  $\mathbf{x}_n$  and  $\mathbf{y}$  is rounded down to the nearest integer before subtracting the product from  $\mathbf{x}_n$ ; and wherein the polynucleotide sequence detects *Neisseria meningitidis*.

- 38. (Withdrawn): An expression vector comprising the isolated polynucleotide of Claim 26.
- 39. (Withdrawn): A host cell transformed with the expression vector of Claim 38.
- 40. (Currently Amended): <u>An immunogenic composition A vaccine</u> comprising the polypeptide of Claim 25 and a pharmaceutically acceptable carrier.
- 41. (Currently Amended): The <u>immunogenic composition vaccine</u> of Claim 40, wherein the <u>immunogenic composition vaccine</u> comprises at least one other *Neisseria meningitidis* antigen <u>in</u> addition to an antigen provided by the polypeptide.
- 42. (Withdrawn): An antibody immunospecific for the polypeptide or immunogenic fragment of Claim 25.
- 43. (Original): A method for inducing an immune response in a mammal comprising administration of the polypeptide of Claim 25.
- 44. (Withdrawn): A method of diagnosing a *Neisseria meningitidis* infection, comprising identifying a polypeptide of Claim 25, or an antibody that is immunospecific for the polypeptide, present within a biological sample from an animal suspected of having such an infection.
- 45. (Withdrawn): A method for inducing an immune response in a mammal comprising administration of the isolated polynucleotide of Claim 26.

Serial No.: 09/889,746 Docket No.: BM45352

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46. (Withdrawn): A therapeutic composition useful in treating humans with *Neisseria* meningitidis comprising at least one antibody directed against the polypeptide of claim 25 and a suitable pharmaceutical carrier.